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AMENDMENT AND RESPONSE UNDER 37 CFR § 1.116 – EXPEDITED PROCEDURE

Scrial Number: 09/657404

Filing Date: September 8, 2000

E: IMPROVED RATE-ADAPTIVE THERAPY WITH AUTOMATIC LIMITING OF MAXIMUM PACING RATE

REMARKS

Applicant has reviewed the Office Action dated April 8, 2003, and the references cited therewith.

Claims 3, 11 and 17 are amended herein; as a result, claims are now pending in this application.

§112 Rejection of the Claims

In the Office Action, claims 7, 9 – 11, 23 and 24 were rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Applicant has requested amendment of claims 3, 11, and 17 herein in order to overcome the rejections.

\$102 Rejection of the Claims

In the Office Action, claims 1-25 were rejected under 35 USC § 102(e) as being anticipated by Kay et al. (U.S. Patent No. 6,411,850).

The rejection is respectfully traversed, and applicant generally reiterates the remarks made in the response to the previous office action. As explained in a telephonic interview between the examiner and the under-signed attorney on July, 10, 2003, applicant believes that the examiner has misunderstood some aspects of the Kay reference in holding that the reference anticipates the pending claims. Applicant understands the examiner's position to be that independent claims 1 and 15 read upon Fig. 1 of the Kay reference where: 1) the maximum sensor-indicated rate MSR recited in the claims corresponds to the paced rate at anaerobic threshold 2 (PR_{AT}) in Fig. 1, and 2) the physiologically favorable maximum heart rate MAR recited in the claims corresponds to the maximum sensor rate 3 in Fig. 1. As was explained in the interview, applicant does not believe that Fig. 1 of Kay can be so characterized. Firstly, the MSR as recited in the claims is a specified maximum value to which the sensor indicated rate is limited, where, as explained in the specification, the sensor indicated rate is the pacing rate dictated by the rate-adaptive algorithm. The paced rate at anaerobic threshold 2 of Kay, on the other hand, does not serve as a maximum limit for the pacing rate. Instead, it is simply a point

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on the rate response curve where the slope of the curve changes in order to take into account that the anaerobic threshold has been reached. That the paced rate at anaerobic threshold 2 of Fig. 1 does not serve as a maximum limit for the pacing rate is evident from the figure since the pacing rate continues to increase up to the maximum sensor rate 3 as the exertion level increases above the anaerobic threshold 5. Secondly, the physiologically favorable maximum heart rate MAR recited in the claims serves as an endpoint for the rate response curve and hence defines its slope, as does the maximum sensor rate 3 of Fig. 1 in Kay. The MAR as claimed, however, is

independent from the maximum limit for the pacing rate which, as just explained, is the maximum sensor indicated rate MSR in applicant's claimed invention. In Fig. 1 of Kay, it is evident that the maximum sensor rate 3 is, in fact, also the maximum limit for the pacing rate and

obviously cannot be independent therefrom.

Applicant believes that the arguments presented during the interview and summarized above have made it clear that the rejections of claims 1-25 as being anticipated by the Kay reference should be withdrawn. Should the examiner have a contrary opinion, applicant would appreciate another interview to discuss the case further prior to issuance of the next advisory action.

amendment and response under 37 CFR § 1.116 – expedited procedure

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Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney 847-432-7302 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

WEIMIN SUN ET AL.

By their Representatives,

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Date 7-10-03

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I hereby certify that this paper is being transmitted by facsimile to the U.S. Patent and Trademark Office on the date shown below.

July 10, 2003

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Signature

GAEG HAUSON